

Amendments to the Specification:

Please replace the paragraph beginning at page 6, line 30, with the following rewritten paragraph:

According to the invention, the following conditions are preferably satisfied:

- (1) Mean grain size of the Al_2O_3 is not larger than 3 μm and mean grain size of ZrO_2 is not larger than 0.5 μm ;
- (2) 20% or more of ZrO_2 content in the sintered ceramics forms crystal of tetragonal system;
- (3) Atomic ~~rate~~ ratio Ti/Mg of TiO_2 and MgO is in a range from 0.5 to 1.2;
- (4) At least a part of the TiO_2 and MgO is dissolved in Al_2O_3 crystal so as to form a solid solution crystal, and the total amount of these materials dissolved corresponds to 0.1% by weight or more of the Al_2O_3 ; and
- (5) There are oxides of Ti and Mg or composite oxide grains that contain these oxides dispersed in at least part of the crystal grains of Al_2O_3 .

Please replace the paragraph beginning at page 7, line 30, with the following rewritten paragraph:

By satisfying these conditions, phase transition enhancement effect can be effectively achieved. The atomic ~~rate~~ ratio (Ti/Mg) of TiO_2 and MgO in the additive is preferably in a range from 0.5 to 1.2. This enables it to suppress the formation of compounds that cause a decrease in strength, so as to obtain sintered material of higher strength.